CLAIMS

1. A method of cementing an oil well or the like, comprising injecting a cement slurry comprising a surfactant and with a water content of less than 50% by volume, and foaming said slurry before allowing the cement to set.

2. A cementing method according to claim 1, characterized in that the water content of the slurry before foaming is in the range 33% to 45%.

3. A method of cementing an oil well or the like, comprising injecting a micro-cement slurry comprising a surfactant and with a water content of less than 72% by volume, and foaming said slurry before allowing the micro-cement to set.

4. A cementing method according to claim 3, characterized in that the water content of the slurry, before foaming, is in the range 58% to 70%.

5. A cementing method according to any preceding claim, characterized in that the foaming quality is in the range 30% to 65%.

6. A cementing method according to any preceding claim, characterized in that the slurry comprises one or more additives of the following type: a dispersing agent, an antigelling agent, a water retainer, a cement setting accelerator or retarder, or a de-foaming stabilizer.

7. A cementing method according to claim 1 or claim 2, characterized in that the solid fraction of the slurry is constituted by 35% to 65% (by volume) particles with an average diameter in the range 200 µm to 600 µm, 20% to 45% Portland cement, and 5% to 25% particles with an average diameter in the range 0.5 µm to 5 µm.

8. A cementing method according to claim 3 or claim 4, characterized in that the solid fraction of the mixture comprises 50% to 75% micro-cement, 15% to 40% particles with an average diameter in the range 0.05 micrometers to 0.5

micrometers. ~~and 0 to 20% particles~~ with an average dimension in the range 3 nonometers to 60 nonometers.

9. Application of the method of claim 8 to squeeze cementing in ~~highly~~ porous ~~media.~~

Add a_1 >